

Page Title	Page Number
CYLINDER BLOCK (DIESEL)	2
CRANKSHAFT AND FLYWHEEL (DIESEL)	6
PISTONS, RINGS AND RODS (DIESEL)	9
CYLINDER HEAD	10
CYLINDER HEAD COVER	13
TIMING GEAR AND CAMSHAFT (DIESEL)	14
OIL PAN, PUMP AND FILTER (DIESEL)	17
GASKET SETS (DIESEL)	21
WATER PUMP AND ATTACHING PARTS (DIESEL)	22
RADIATOR (DIESEL)	25
MANIFOLDS (SEE NOTE "A")	26
MANIFOLDS (SEE NOTE "A") (DIESEL)	29
INJECTION SYSTEM (DIESEL)	30
INJECTION SYSTEM	33
INJECTOR ASSEMBLY AND PUMP	34
INJECTOR ASSEMBLY AND PUMP	37
TURBOCHARGER	38
TURBOCHARGER (SEE NOTE A)	41
TURBOCHARGER (SEE NOTE "A")	42
FUEL FILTERS (DIESEL)	45
MUFFLER	46
AIR CLEANER	49
FUEL TANK AND LINES	50
FUEL TANKS AND LINES	53
FUEL PUMP	54
THROTTLE AND FUEL SHUT-OFF	57
ELECTRICAL WIRING	58
ALTERNATOR (SEE NOTE "A")	62
ALTERNATOR (SEE NOTE ""A"") - ALTERNATOR (SEE NOTE "A")	65
STARTER (SEE NOTE "A")	66
STARTER (SEE NOTE ""A"") - STARTER (SEE NOTE "A")	69
STARTER SOLENOID	70
INSTRUMENTS	73
LIGHTING (LESS CAB)	74
LIGHTING (WITH CAB)	77
WARNING LAMP	78
STEERING WHEEL AND COLUMN	81
HYDROSTATIC STEERING PUMP	82
STEERING POWER RACK (SEE NOTE "A")	85
STEERING POWER RACK (SEE NOTE ""A"") - STEERING POWER RACK (SEE NOTE "A")	86
FRONT SUSPENSION (WIDE ROW CROP)	89
FRONT SUSPENSION (WESTERN)	90
FRONT WHEELS (ROW CROP AND WESTERN)	93
REAR WHEELS (ROW CROP AND WESTERN)	94
REAR WHEELS (8 RAIL P.A.V.T.)	97
CENTER HOUSING	98
TRANSMISSION HOUSING (8 SPEED AND MULTI-POWER)	101
TRANSMISSION (8 SPEED)	102
TRANSMISSION (MULTI-POWER)	105

TABLE OF CONTENT

Page00-00

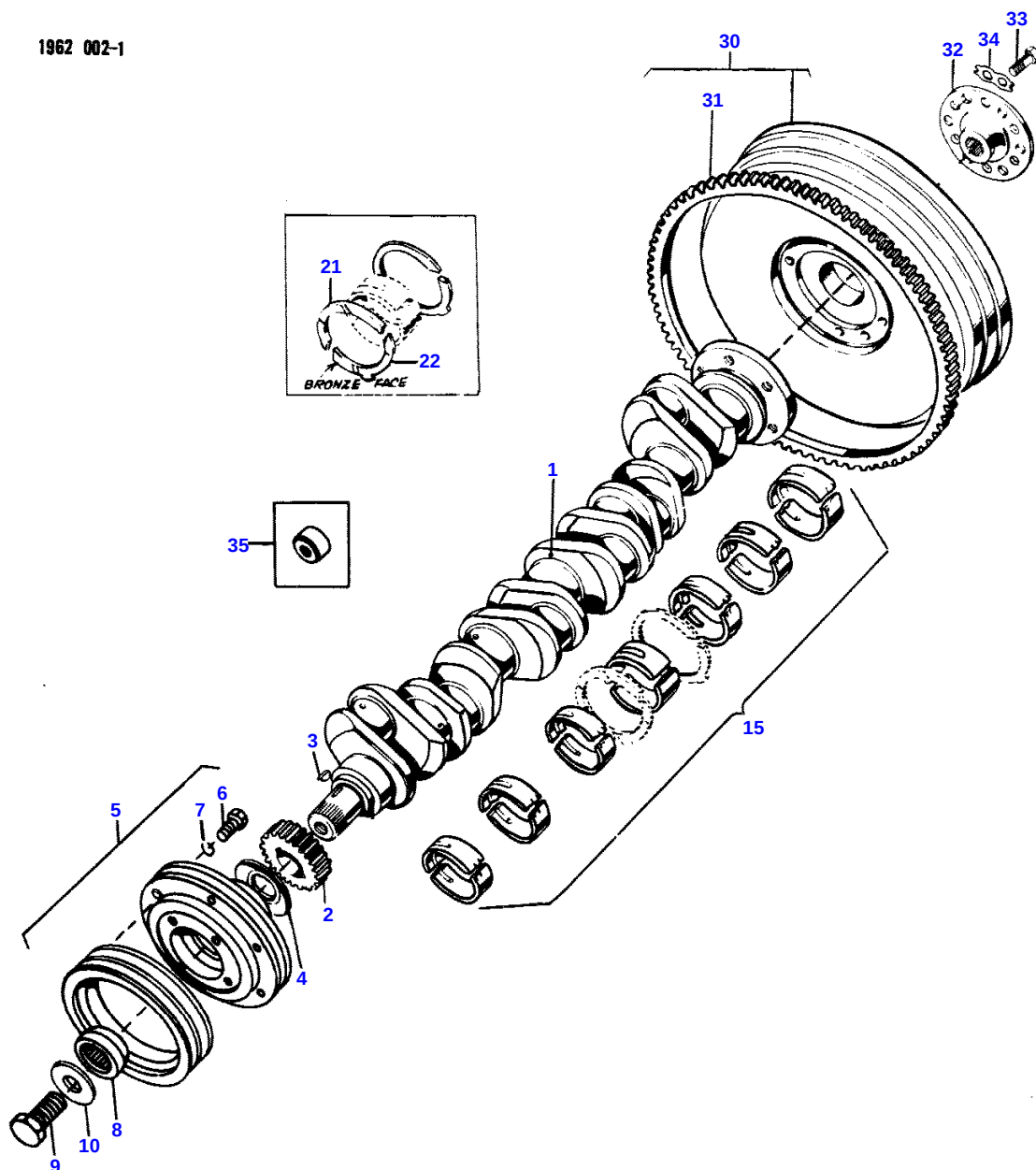
GEAR SHIFT LINKAGE (8 SPEED)	109
GEAR SHIFT LINKAGE (MULTI-POWER)	110
SHIFT LINKAGE (HIGH AND LOW RANGE)	113
MULTI-LINKAGE AND P.T.O. SHIFT CONTROLS	114
MULTI-POWER AND P.T.O. SHIFT VALVE	117
P.T.O. CLUTCH AND HIGH - LOW RANGE	118
CLUTCH CONTROLS	121
CLUTCH	122
POWER TAKE-OFF GEAR TRAIN	125
POWER TAKE-OFF SHIFT	129
DIFFERENTIAL LOCK CONTROLS	130
DIFFERENTIAL LOCK VALVE	133
DIFFERENTIAL (WITHOUT LOCK) (8 TOOTH PINION)	134
DIFFERENTIAL (WITHOUT LOCK)	137
DIFFERENTIAL (WITH LOCK)	138
DIFFERENTIAL (WITH LOCK)	141
DIFFERENTIAL (WITH LOCK)	142
REAR AXLE AND BRAKES (USED AXLE WITH 2-3/8" WIDE RING GEAR)	145
REAR AXLE AND BRAKES (USED AXLE WITH 1-3/4" WIDE RING GEAR)	146
REAR AXLE AND BRAKES (AUSTRALIA AND SOUTH AFRICA)	150
BRAKE CONTROLS	153
BRAKE CYLINDER	154
OIL COOLER, FILTER AND RADIAL PUMP	157
HYDRAULIC LINES	158
HYDRAULIC OIL FILTER	161
RADIAL HYDRAULIC PUMP	162
RADIAL PUMP VALVE BODY (REPAIRS)	165
FRONT HYDRAULIC COVER	166
CHARGING PUMP	169
QUADRANT LEVER AND SUPPORT (USED TRACTORS WITH ROCKSHAFT)	170
QUADRANT LEVER AND SUPPORT (USED TRACTORS WITH ROCKSHAFT)	173
CONTROL VALVE	174
CONTROL CONSOLE, QUADRANT RESPONSE ADJUSTERS	178
CONTROL CONSOLE (WESTERN)	181
REAR LIFT COVER, ROCKSHAFT AND ARMS	182
DRAFT, POSITION AND PRESSURE CONTROL LINKAGE	185
DEPTH CONTROL LINKAGE (LESS CAB)	186
DEPTH CONTROL LINKAGE (WITH CAB)	189
AUXILIARY HYDRAULICS (USED WITH ROCKSHAFT WITH SINGLE VALVE)	190
AUXILIARY HYDRAULICS	193
SINGLE AUXILIARY VALVE	194
DUAL AUXILIARY VALVE	197
CONTROL SPRINGS AND TOP LINK	198
ADAPTER KIT AND RAPID COUPLER	201
LIFT LINKAGE	202
LIFT CYLINDERS AND HOSES	205
HEAVY DUTY DRAWBAR	206
WIDE SWINGING ROLLER DRAWBAR (WESTERN)	209
FENDERS AND TOOL BOX	210
FIREWALL AND INSTRUMENT PANEL (TRACTORS WITHOUT CAB)	213
PLATFORM AND BATTERY DOOR (TRACTORS WITHOUT CAB)	214
FIREWALL, INSTRUMENT PANEL AND BATTERY DOOR	217

HOOD AND GRILLE	218
SEAT (USED TRACTOR SERIAL NUMBER 9B67034 AND UP)	221
SEAT (USED PRIOR TO TRACTOR SERIAL NUMBER 9B67034)	222
SEAT (USED PRIOR TO TRACTOR SERIAL NUMBER 9B67034) (DELUXE)	225
SEAT SUSPENSION	226
CAB	229
FRONT AND REAR WINDOWS	230
SIDE WINDOWS AND DOOR	233
WINDSHIELD WIPER	234
CAB AIR CLEANER	237
CAB BLOWER	238
AIR CONDITIONING	241
COMPRESSOR	242
CAB HEATER	245
SAF-T-FRAME AND CANOPY	246
EMBLEMS AND LABELS	249
PAINT, SEALANT, OIL	250

6

CRANKSHAFT AND FLYWHEEL

1962 002-1



1st Print

651 327 M93 (Issue 1) 2/78

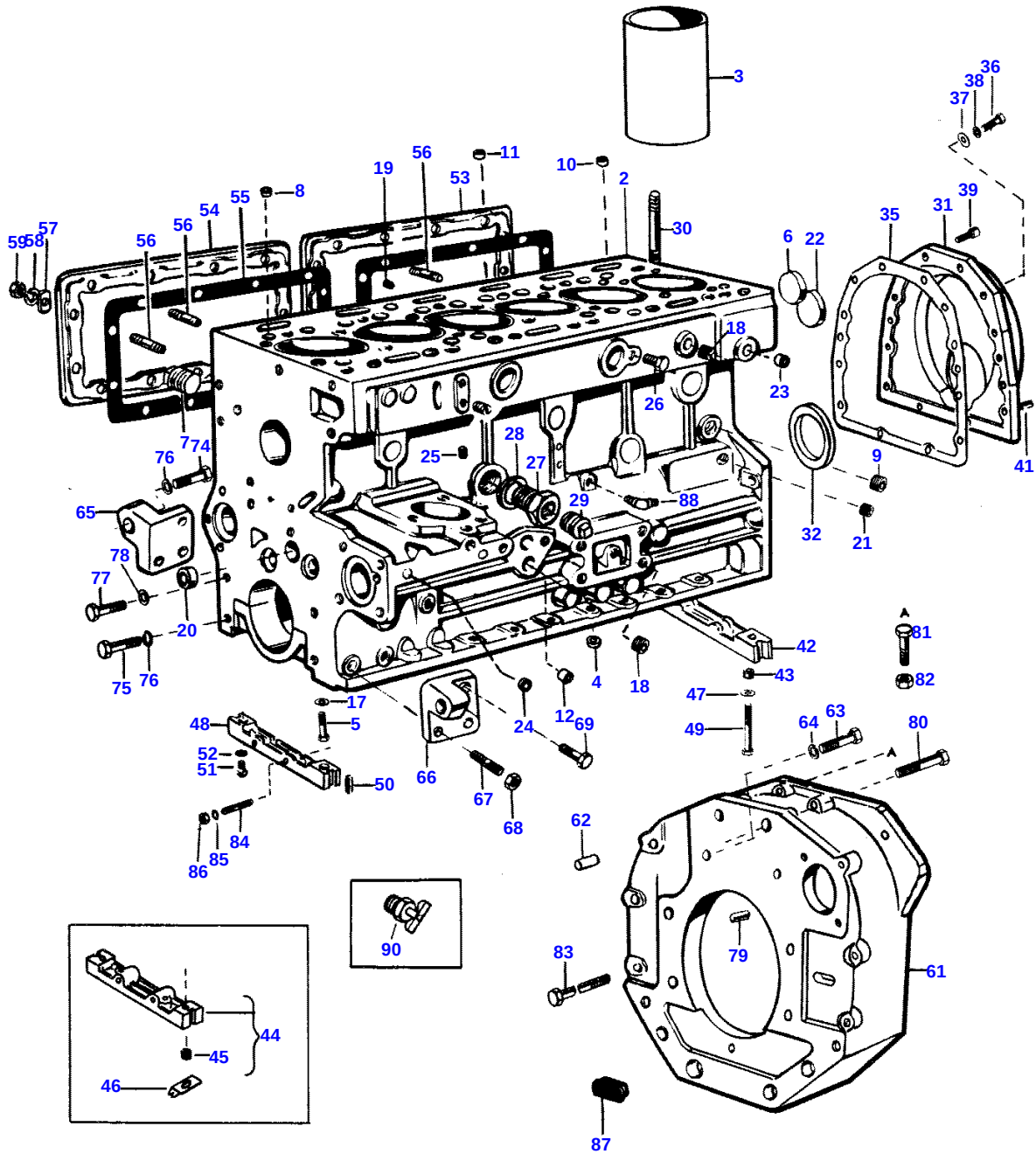
CRANKSHAFT AND FLYWHEEL (DIESEL)

Item	Part Number	Qty	Description
1	742161M1	1	Crankshaft (Perkins No. 31323262)
2	733757M1	1	Gear (Perkins No. 31171211)
3	2196X	1	Key (1/4 x 7/8" Woodruff) (Perkins No. 0500012)
4	733758M1	1	Flange, Oil Thrower (Perkins No. 33415311)
5	1446062M91	1	Pulley Assembly (Perkins No. 2635723)
6	353522X1	6	Bolt (5/16 x 1-3/8" NF, Hex.) (Perkins No. 0096232)
7	353446X1	6	Washer (5/16" Lock)
8	740013M1	1	Ring, Pulley (Perkins No. 33171116)
9	376183X1	1	Bolt, Pulley (Perkins No. 32162317)
10	735559M1	1	Washer, Pulley (Perkins No. 33125129)
15	744001M91	1	Insert Set, Main Bearing (Std.) (Perkins No. 68078)
	742590M91	1	Insert Set, Main Bearing (+.010") (Order 744210M91) (Perkins No. 89066A)
	742591M91	1	Insert Set, Main Bearing (+.020") (Perkins No. 89066B)
	736933M91	1	Insert Set, Main Bearing (+.030") (Perkins No. 85010C)
21	735337M1	2	Washer, Thrust (Upper) (Std.) (Perkins No. 31137311)
	735742M1	AR	Washer, Thrust (Upper) (+.007") (Perkins No. 31137312)
22	735338M1	2	Washer, Thrust (Lower) (Std.) (Perkins No. 31137321)
	735743M1	AR	Washer, Thrust (Lower) (+.007") (Perkins No. 31137322)
30	740853M91	1	Flywheel Assembly (Perkins No. 41112803)
31	731988M1	1	Gear, Ring (Perkins No. 0410264)
32	740635M1	1	Adapter (Perkins No. 33472561)
33	376513X1	6	Bolt (Perkins No. 0096837)
34	731192M1	3	Tabwasher (Perkins No. 0921062)
35	741077M1	1	Plug, Crankshaft (Perkins No. 33211123)

2

CYLINDER BLOCK

1962 001-4



CYLINDER BLOCK (DIESEL)

Item	Part Number	Qty	Description
	539339M91	1	(A) Engine Assembly (Complete) (Used w/Airesearch Turbocharger) (Perkins No. AT6-354-22431) (1135)
	528192M91	1	(B) Engine Assembly (Complete) (Used w/Holset Turbocharger) (Perkins No. AT6-354-21722) (1135)
	528191M91	1	Engine Assembly (Complete) (Perkins No. ATC6-354-21724) (1105)
	1896320M91	1	(C, D) Block Assembly (Short) (Perkins No. 22160) (1135)
	1896269M91	1	(C, E) Block Assembly (Short) (Order 1896320M91) (Perkins No. 21850) (1135)
	1896271M91	1	(C) Block Assembly (Short) (Perkins No. 21844) (1105)
2	741315M91	1	Block Assembly (Stripped) (Perkins No. 92200) (1135)
	742808M91	1	(F) Block Assembly (Stripped) (Perkins No. 94981) (1105)
	741260M91	1	(G) Block Assembly (Stripped) (Order 742808M91) (Perkins No. 92036) (1105)
3	736507M2	6	Liner Cylinder (Perkins No. 31358341)
4	733072M1	14	Thimble, Main Bearing Cap (Perkins No. 33142111)
5	1476108X1	14	Bolt, Bearing Cap (5/8 x 3-3/4" NF, Hex)
6	735865M1	6	Plug (1-1/4" Cup Type) (Order 731354M1) (Perkins No. 0650563)
	735869M1	1	Plug (1-1/2" Cup Type)
7	363819X1	3	Plug (3/4" P.T. Sq. Hd.)
8	737785M1	1	Plug, Cylinder Block Top Face (Perkins No. 31157133)
9	365333X1	1	Plug (1/4" P.T. Hex., Sckt.)
10	737787M1	6	Plug (53/64" Cup Type) (1/2" Dia. Hole) (Perkins No. 33157135)
11	737786M1	2	Plug (53/64" Cup Type) (3/8" Dia. Hole) (Perkins No. 33157134)
12	732961M1	2	Plug (41/64" Cup Type) (Perkins No. 32417117)
17	731141M1	14	Shim (.020") (Perkins No. 0760001)
18	375186X1	2	Plug, Oil Return
19	736867M1	1	Plug, Intake Manifold Side (Perkins No. 32417133)
	365333X1	1	Plug (1/4" P.T. Hex., Sckt.)
20	731356M1	2	Plug (11/16" Cup Type) (Perkins No. 0650566)
21	356039X1	1	Plug (1/8" P.T. Hex., Sckt.)
22	733705M1	1	Plug, Camshaft Chamber, Rear (Perkins No. 32416105)
23	736557M1	3	Plug (7/16" Cup Type) (Perkins No. 32417127)
24	733855M1	1	Plug (13/32" Cup Type) (Perkins No. 32417115)
25	736868M1	2	Plug, Cylinder Block Top Face (Perkins No. 32417134)
26	733707M1	3	Plug (5/16" NF, Sldt.) (Perkins No. 32114116)
	735870M1	1	Plug (53/64" Cup Type) (Not Used On 539339M91, Eng.) (Perkins No. 32417122)
27	733515M1	1	Adapter, Water Heater (Perkins No. 33534117)
28	733514M1	1	Washer, Adapter (Perkins No. 2411170)
29	363819X1	1	Plug
30	735245M1	2	Stud (1/2" NF x 4-1/8") (Perkins No. 32526312)
31	741718M1	1	(H) Housing, Assembly (Perkins No. 37513851)
32	1447049M1	1	(H) Seal (Perkins No. 2415391)
31	741258M91	1	(J) Housing Assembly, Ord. (1) 1447049M1 & (1) 741718M1 (Perkins No. 92038)
32	1447049M1	1	Seal (Perkins No. 2415391)
35	740828M1	1	Gasket (Perkins No. 36817157)
36	353519X1	10	(K) Bolt (5/16 x 1" NF, Hex) (Perkins No. 0746211)
37	353770X1	10	(H) Washer (5/16" Heavy Flat)
38	353446X1	8	(J) Washer (5/16" Flat)
39	357987X1	2	(H) Screw (5/16 x 1" NF, Sckt. Hd.)
	375852X1	2	(J) Screw (5/16 x 1-1/4" NC, Sckt. Hd.)
41	376573X1	2	Dowel, Housing To Block (Perkins No. 2116078)
42	734841M1	2	(D) Bridge (Perkins No. 36277831)
43	742318M1	2	(D) Insert (Self Locking Helecoil) (Perkins No. 21374467)
44	736126M91	1	(E) Bridge Assembly (Rear) (Perkins No. 41474004)
45	376553X1	2	Insert (Helecoil) (Perkins No. 2137485)
46	736473M1	2	(E) Washer (Tab Locking) (Perkins No. 31731517)
47	732575M1	2	Washer, Tab (Perkins No. 2411152)
48	734841M1	1	Bridge (Front) (Perkins No. 36277831)
49	376514X1	2	Bolt (5/16 x 7-5/8" NC, Hex) (Perkins No. 32146306)
50	733721M1	4	Gasket, Bridge Piece Sides (Perkins No. 32811408)
51	376572X1	4	Screw (1/4 x 3/4" NF, Phillips) (Perkins No. 2176369)
52	735898M1	4	Washer, Bridge Piece (Perkins No. 0920521)
53	733745M1	1	Cover, Tappet Inspection (Perkins No. 37554114)
54	736099M91	1	Cover Assembly, Front (Perkins No. 37554554)
55	733744M1	2	Gasket, Cover (Perkins No. 36846408)
56	731378M1	23	Stud (5/16" NF x 1") (Perkins No. 0826220)
	733741M1	1	Stud, Cover To Block (Perkins No. 0826241)
57	732044M1	24	Washer, Elongated (Perkins No. 36151505)
58	353446X1	24	Washer (5/16" Lock)
59	353916X1	24	Nut (5/16" NF, Hex.) (Perkins No. 0576002)

CYLINDER BLOCK (DIESEL)

Item	Part Number	Qty	Description
61	740651M1	1	Housing (Perkins No. 37133441)
62	1028450M1	2	Dowel, Housing To Block
63	353542X1	6	Bolt (3/8 x 1-1/2" NF, Hex.)
64	1440274X1	6	Washer (3/8" Flat)
65	504557M1	1	Support (Right)
66	504558M1	1	Support (Left)
67	731866M1	4	Stud, Support To Block (Perkins No. 0826403)
68	353427X1		Nut (5/8" NF, Hex.)
69	833315M1	2	Bolt (5/8 x 1-1/4" NC, Hex., Lock)
74	354714X1	2	Bolt (3/4 x 2-1/2" NC, Hex.)
75	354712X1	2	Bolt (3/4 x 2-1/4" NC, Hex.)
76	353440X1	4	Washer (3/4" Lock)
77	354737X1	2	Bolt (3/4 x 5-1/2" NC, Hex.)
78	353775X1	2	Washer (3/4" Flat)
	191314M1	2	Dowel, Engine To Transmission
80	366088X1	2	(L) Bolt (7/16 x 1-1/4" NC, Hex., Grade 8)
81	370869X1	3	(L) Bolt (7/16 x 2-3/4" NC, Hex., Grade 8)
82	370873X1	3	(L) Nut (7/16" NC, Hex.)
83	370871X1	3	(L) Bolt (7/16 x 7-1/2" NC, Hex., Grade 8)
83	369455X1	2	(L) Bolt (1/2 x 8" NC, Hex., Grade 8)
80	353704X1	2	(M) Bolt (7/16 x 1-3/4" NC, Hex.)
81	353712X1	3	(M) Bolt (7/16 x 2-5/8" NC, Hex.)
82	355645X1	3	(M) Nut (7/16" NC, Hex.)
83	357258X1	3	(M) Bolt (7/16 x 7-1/2" NC Hex.)
	368410X1	2	(M) Bolt (1/2 x 8" NC, Hex.)
84	731647M1	2	Stud (5/16" NF x 1-5/16") (Perkins No. 0826201)
85	353446X1	2	Washer (5/16" Lock)
86	353916X1	2	Nut (5/16" NF, Hex.) (Perkins No. 0576002)
87	732902M1	1	Plug, Flywheel Housing (Perkins No. 37813113)
88	836411M91	1	Elbow, Lube Oil Pressure Gauge (Perkins No. 0201568)
90	1851764M1	1	Plug, Cylinder Block, Drain (Perkins No. 31419)

(A) - Used MF 1135 Tractor Engine Serial Number 354UA16470T And Up.

(B) - Used Prior To MF1135 Tractor Engine Serial Number 354UA16470T Also Used As Alternate To 539339M91 Engine After Engine Serial Number 354UA16470T.

(C) - Included Pistons, Connecting Rods, Crankshaft And Camshaft.

(D) - Used Late Production Engines.

(E) - Used Early Production Engines.

(F) - Used MF 1105 Tractor Engine Serial Number 354UA2004TSL And Up.

(G) - Used Prior To MF 1105 Tractor Engine Serial Number 354UA2004TSL.

(H) - Used MF 1135 Tractor Engine Serial Number 354UA489OL And Up And All MF 1105 Tractor Engine.

(J) - Used MF 1135 Tractor Prior To Engine Serial Number 354UA48970L.

(K) - Quantity Of 8 Used Prior To MF 1135 Tractor Engine Serial Number 354UA48970L.

(L) - Used Tractor Serial Number 9B67392 And Up.

(M) - Used Prior To Tractor Serial Number 9B67392.